





Illumination device with at least one LED as the light source

Patent number: EP1278250
Publication date: 2003-01-22
Inventor: HUBER GUENTER (DE); KUMMER FRANZ DR (DE);
ELLENS ANDRIES DR (NL)
Applicant: PATRA PATENT TREUHAND (DE)
Classification:
- International: H01L33/00; H01L25/13
- european: H01L25/13, H01L33/00B3B
Application number: EP20020010870 20020515
Priority number(s): DE20011033352 20010716

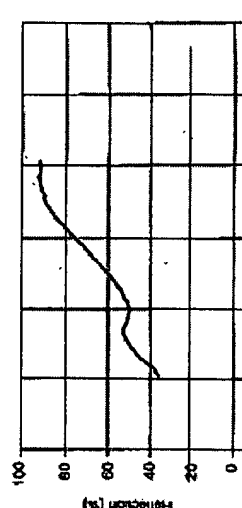
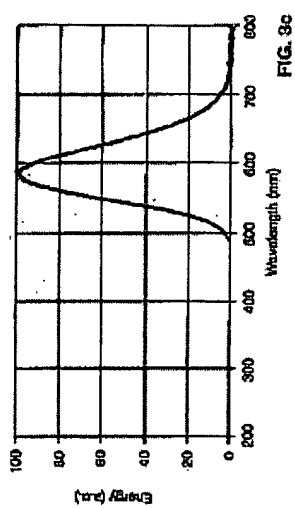
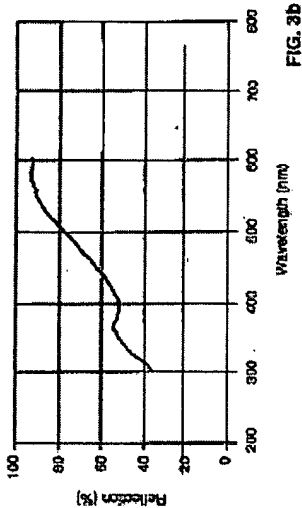
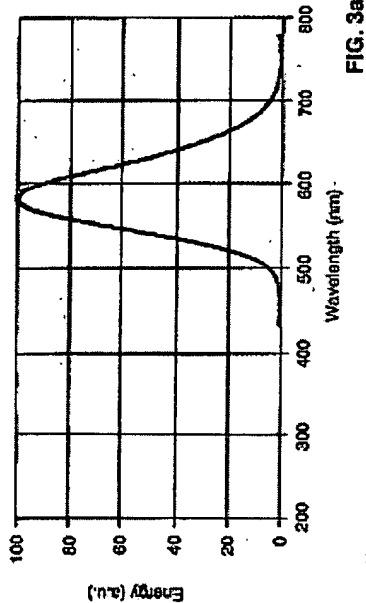
Also published as:

 US6657379 (B2)
 US2003030368 (A1)
 JP2003124527 (A)
 DE10133352 (A1)

Abstract of EP1278250

Illuminating unit comprises an LED as a light source emitting primary radiation in the region of 300-485 nm. The radiation is converted partially or completely into longer wavelength radiation using a luminescent material emitting yellow-orange with a wavelength of the peak emission at 540-620 nm and originating from Eu-activated Sialon of formula $Mp/2Si_{12-p}qAlp+qOqN_{16-q}$; Eu^{<2+>} (where M = Ca or Ca in combination with Sr or Mg; q = 0-2.5; and p = 0.5-3). Preferred Features: The Al can be partially (up to 20 mol.%) replaced by Ga. The average grain diameter of the luminescent powder is 0.5-5 μ m. The primary radiation is a chlorosilicate or a Y- or Tb-based garnet.

THIS PAGE BLANK (USPTO)



Data supplied from the esp@cenet database - Worldwide

THIS PAGE BLANK (USPTO)